EVT 155 Site Mapping and GIS

Course Description: A course on mapping techniques used in the environmental field. Topics include: map concepts, coordinate systems, and site modeling. Course activities include basic principles of mapping, with an introduction to CAD and GIS software.

Prerequisites(s): EVS 110 and MAT 125 **Corequisite(s):** No corequisite

Lecture Hours: 2	Lab Hours: 3	Credit Hours: 3
Lab Fee: 105	Supplemental Fee: 0	Purpose:
☐ Transfer Assurance Guide Course (TAG)	☐ Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: □ Web	X Hybrid	X Classroom
Semesters Offered: □ Fall	X Spring	X Summer

Course Primary Text:

Title: GIS Tutorial 1 Basic Workbook (for ArcGIS 10.3X)	Edition:
Author(s): Wilpen Gorr and Kristen Kurland	
Publisher: Esri Press	

Supplemental Materials:

Optional text: AutoCAD 2019 Instructor – James Leach
Portable file storage device

Course Outcomes:

1	ABET (a) - an ability to apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities.
2	ABET (e) - an ability to identify, analyze, and solve narrowly defined engineering technology problems.
3	ABET (f) - an ability to apply written, oral, and graphical communications in both technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4	ABET (i) - a commitment to quality, timeliness, and continuous improvement.

Course Topics:

Week 1	Introduction to AutoCAD, GUI, basic draw commands
Week 2	AutoCAD plotting, intermediate draw commands, file utilities, zooms and panning
Week 3	Object selection, selection sets, object snaps, modify commands
Week 4	Layers, layer properties and object properties, user coordinate system use
Week 5	Modify commands continued
Week 6	Text, Mtext and text editing
Week 7	Dimensioning, dimension editing and use of Dimension styles, Test 1
Week 8	Introduction to GIS
Week 9	GIS Map design
Week 10	GIS outputs
Week 11	Geodatabases
Week 12	Spatial Data
Week 13	Spatial Data Processing
Week 14	Spatial Data Processing continued
Week 15	Digitizing, Test 2

Methods of Evaluation/Assessment

X Formative: □ Summative

List assessment activities (e.g. quizzes, discussions, essays, research papers, debates, oral presentations, exams):

Labs	@ 80%
Test 1	@ 10%
Test 2	@ 10%

Course Keeper: James Decker, PS Date Completed: 4/15/2019